



August 11, 2010

Via Electronic Mail: ehaertle@dtsc.ca.gov

Department of Toxic Substances Control (DTSC)  
P.O. Box 806  
Sacramento, CA 95812-0806,  
Attention: Ellen L. Haertle, MS-22

Re: DTSC's Proposed Standards for Management of Waste Solar Panels  
Department Reference Number: R-2010-01

Dear Ellen Haertle and DTSC:

On behalf of Worksafe, I write to inform you of our opposition to the proposed deregulation of potentially hazardous photovoltaic (PV) waste. Worksafe is a California-based non-profit organization dedicated to promoting occupational safety and health through education, training and advocacy. We focus on eliminating all types of workplace hazards and also on workplace created toxic hazards that impact at-risk communities in California.

As the Silicon Valley Toxics Coalition (SVTC) has outlined in their comments to DTSC, the proposed system of management of hazardous PV waste at the end-of-life cycle poses significant risk to human health and the environment.

Recent reports indicate that Cadmium laden PV waste holds the potential to severely impact environmental and human health if not recycled properly. Toxicity tests show that a number of PV modules sold in California have such high levels of toxicity as to be classified as hazardous waste. Panels based on Cadmium compounds (cadmium sulfide (CdS), cadmium telluride (CdTe), and cadmium stannate) are among the failing panels, making them hazardous waste. From our estimates, California utilities and homeowners will be responsible for the disposal of 900,000 pounds of cadmium. This data is based on the total planned, announced, and installed PV in California's regional grid. Yet, with the current capacity to recycle CdTe in the US, it will take 155 years to recycle this waste.

Worksafe is also concerned that DTSC's rules do not address any environmental justice (EJ) considerations as is required by DTSC's own Environmental Justice Policy (2008). An important EJ consideration in this rule includes a significant concern regarding worker safety in handling hazardous end-of-life (EOL) modules.

In addition to the lack of EJ considerations, the following important issues are missing from DTSC's regulatory framework for end-of-life PV: a provision for Extended Producer Responsibility (EPR); resources for regulatory enforcement; product labeling; pre-market testing for hazardous waste; DTSC testing protocols and regulatory threshold for hazardous materials; hazardous waste characterization for nanomaterials and other emerging technologies; adequate description of domestic recycling (treatment); and the inclusion of household hazardous waste.

Thank you for considering our comments and suggestions, and those of SVTC. We hope that DTSC will revise its proposed regulations.

Sincerely,

A handwritten signature in cursive script, reading "Gail Bateson". The signature is written in dark ink and is positioned above the printed name and title.

Gail Bateson  
Executive Director